

TANK INSPECTION MEMORANDUM

To: Tyler Gulliksen, DA ECC Intern
US Army Corps of Engineers
Little Goose Lock and Dam

From: Daniel Rohde, CHMM
Certified Steel Tank Institute Inspector, No. (b)(6)
DH Environmental, Inc.

Reviewed by: David Hill, PE, CHMM, CPEA
Principal, DH Environmental, Inc.



Date: August 4th, 2021

A handwritten signature in blue ink that reads "David J. Hill".

Re: Annual Periodic Tank Inspections Report

DH Environmental, Inc. (DHE) is pleased to provide the US Army Corps of Engineers (USACE) this Memorandum including the attached above-ground storage tank (AST) inspection reports that were prepared pursuant to direction from USACE Environmental Compliance Coordinator Intern Tyler Gulliksen.

On July 28th 2021, certified Steel Tank Institute (STI) inspector Daniel J Rohde, CHMM inspected 16 ASTs at Little Goose Lock & Dam in accordance with the facility's Spill Prevention, Control and Countermeasures Plan (SPCC).

Following the STI SP001 Standard for the inspection of aboveground storage tanks, the work performed was intended to meet the requirements of 40 CFR 112.8(c)(6) which states, "Test or inspect each aboveground container for integrity on a regular schedule and whenever you make material repairs. You must determine, in accordance with industry standards, the appropriate qualifications for personnel performing tests and inspections, the frequency and type of testing and inspections, which take into account container size, configuration, and design (such as containers that are: shop-built, field-erected, skid-mounted, elevated, equipped with a liner, double-walled, or partially buried). Examples of these integrity tests include, but are not limited to: visual inspection, hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or other systems of non-destructive testing. In accordance with the SPCC Rule, owners/operators of petroleum equipment assets subject to the Rule are required to

keep comparison records and you must also inspect the container's supports and foundations. In addition, owners/operators of petroleum equipment assets subject to the Rule must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and tests kept under usual and customary business practices satisfy the recordkeeping requirements."

PRESENTATION OF INSPECTION RECORDS

The tank inspection records are summarized below in table format. Table 1 is an inclusive inspection summary of all inspected storage tanks with inspection findings and recommended actions. There are two additional attachments to this memorandum:

- Attachment A includes the STI SP001 inspection reports for the 2021 annual AST inspections.
- Attachment B includes the STI SP001 Certifications for the Tank Inspector.

ONGOING INSPECTION SCHEDULE

The 16 inspected aboveground storage tanks all appear in generally acceptable condition at the time of inspection. Noted issues with these tanks should be corrected as soon as possible. Periodic monthly, and annual inspections should continue to be performed in accordance with the STI SP001 Standard for the Inspection of Aboveground Storage Tanks Table of Inspection Schedules. Formal External Inspection of the four powerhouse oil storage room tanks are required every 20 years, and should be continued on this schedule unless periodic inspections reveal integrity problems that would necessitate a formal inspection sooner.

INSPECTION SUMMARY

Tank ID	Location	Finding Description	Recommended Actions
Dirty Lube Oil	Powerhouse Oil Storage Room	Storage tank does not have normal or emergency vents.	None, no available ports on storage tank.
		No NFPA placards or content labels on the storage tank.	Install NFPA placards and label tank contents.
Clean Lube Oil	Powerhouse Oil Storage Room	Storage tank does not have an emergency vent.	None, no available ports on storage tank.
		No NFPA placards or content labels on the storage tank.	Install NFPA placards and label tank contents.
Dirty Transformer Oil	Powerhouse Oil Storage Room	Storage tank does not have normal or emergency vents.	Install emergency vent on available port on top of storage tank.
		Coating failure and corrosion on tank supports.	Clean and resurface corroded tank supports.
		No NFPA placards or content labels on the storage tank.	Install NFPA placards and label tank contents.
Clean Transformer Oil	Powerhouse Oil Storage Room	Storage tank does not have an emergency vent.	Install emergency vent on available port on top of storage tank.
		No NFPA placards or content labels on the storage tank.	Install NFPA placards and label tank contents.
Skimmer	Powerhouse	There is a leaking fitting on the fill line.	Perform scheduled repairs on fitting.
Oil Water Separator	Powerhouse	Storage tank does not have normal or emergency vents	Install vent on downturned pipe on top of tank, if possible, with system operation.
Emergency Diesel Generator	Powerhouse	Diesel observed in interstitial space. (Possibly from accidental filling of interstice during installation/testing)	Remove diesel and clean interstice. Monitor monthly through emergency vent for diesel intrusion and immediately schedule leak test on tank if any diesel is observed after cleaning. Check leak detector sensor for function.
Diesel Storage	Tailrace	NONE	NONE
Gravity Lube Oil	Powerhouse	Storage tank does not have normal or emergency vents.	None, no available ports on storage tank.
		No NFPA placards or content labels on the storage tank.	Install NFPA placards and label tank contents.
Headgate Hydraulic	Intake Deck	The primary tank has no emergency ventilation.	Remove short bolts from manway. Install long bolts in every other hole to allow at least 1.5 inches of free travel.
		The interstice has no emergency ventilation.	Confirm available port is to interstice and install UL Listed emergency vent.
		No NFPA placards or content labels on the storage tank.	Install NFPA placards and label tank contents.
Intake Crane	Intake Deck	Platform ladder has no safety chain.	Install safety chain at ladder to platform.

Tank ID	Location	Finding Description	Recommended Actions
Spillway EDG	North Shore Diesel Generator Room	No secondary containment for storage tank.	Install berm in room and seal drain to provide adequate secondary containment.
		Storage tank does not have normal or emergency vents.	None, no ports available on storage tank.
Gasoline Storage	Lower Resource Yard	NONE	NONE
JFF EDG	Juvenile Fish Facility	Evidence of leak from generator during operation.	Repair leak as part of routine maintenance.
Used Oil Storage 1		Storage tank does not have normal or emergency vents.	None, no available ports on storage tank.
Used Oil Storage 2		Storage tank does not have normal or emergency vents.	None, no available ports on storage tank.

Table 1: Storage Tank Inspection Findings and Recommendations

STI SP001 Annual Inspection Checklist

General Inspection Information: US Army Corps of Engineers Little Goose Dam 2021 SPCC Inspections

Inspection Date: <u>7/28/2021</u>	Prior Inspection Date: _____	Retain until date: <u>7/28/2024</u>
Inspector Name (print): <u>Daniel J Rohde, CHMM</u>	Inspector Signature: <u>Daniel J Rohde</u>	Title: <u>STI SP001 Tank Inspector</u>
Tank(s) inspected ID: <u>Dirty Lube Oil Tank</u>	Regulatory facility name and ID number (if applicable) _____	

Inspection Guidance:

- This checklist is intended as a model. Locally developed checklists are acceptable as long as they are substantially equivalent (as applicable).
- For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector per paragraph 4.1.2 of the standard.
- Remove promptly standing water or liquid discovered in the primary tank, secondary containment area, interstice, or spill container. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- In order to comply with EPA SPCC (Spill Prevention, Control and Countermeasure) rules, a facility should regularly test liquid level sensing devices to ensure proper operation (40 CFR 112.8(c)(8)(v)).
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for at least 36 months.
- Complete this checklist on an annual basis, supplemental to the owner monthly-performed inspection checklists.
- **Note: If a change has occurred to the tank system or containment that may affect the SPCC plan, the condition should be evaluated against the current plan requirement by a Professional Engineer knowledgeable in SPCC development and implementation.**

ITEM		STATUS	COMMENTS / DATE CORRECTED
Tank Foundation/Supports			
1	Free of tank settlement or foundation washout?	☑ Yes ☐ No	
2	Concrete pad or ring wall free of cracking and spalling?	☑ Yes ☐ No ☐ NA	
3	Tank supports in satisfactory condition?	☑ Yes ☐ No ☐ NA	
4	Is water able to drain away from tank if tank is resting on a foundation or on the ground?	☑ Yes ☐ No ☐ NA	
5	Is the grounding strap between the tank and foundation/supports in good condition?	☐ Yes ☐ No ☑ NA	
Tank Shell, Heads and Roof			
6	Free of visible signs of coating failure?	☑ Yes ☐ No ☐ NA	
7	Free of noticeable distortions, buckling, denting, or bulging?	☑ Yes ☐ No	

8	Free of standing water on roof?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
9	Are all labels and tags intact and legible?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Tank Manways, Piping, and Equipment			
10	Flanged connection bolts tight and fully engaged with no sign of wear or corrosion?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
Tank Equipment			
11	Normal and emergency vents free of obstructions?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
12	Normal vent on tanks storing gasoline equipped with pressure/vacuum vent?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
13	Are flame arrestors free of corrosion and are air passages free of blockage?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
14	Is the emergency vent in good working condition and functional, as required by manufacturer? Consult manufacturer's requirements. Verify that components are moving freely (including long-bolt manways).	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	The storage tank does not have an emergency vent. Due to the design and nature of the storage tank, it will not be feasible to install an emergency vent.
15	Is interstitial leak detection equipment in good condition? Are windows on sight gauges clear? Are wire connections intact? If equipment has a test function, does it activate to confirm operation?"	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
16	Are all valves free of leaks, corrosion and other damage? Follow manufacturers' instructions for regular maintenance of these items. Check the following and verify (as applicable): <input type="checkbox"/> Anti-siphon valve <input type="checkbox"/> Check valve <input type="checkbox"/> Gate valve <input type="checkbox"/> Pressure regulator valve <input type="checkbox"/> Expansion relief valve <input type="checkbox"/> Solenoid valve <input type="checkbox"/> Fire valve <input type="checkbox"/> Shear valve	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
17	Are strainers and filters clean and in good condition?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Insulated Tanks			
18	Free of missing insulation? Insulation free of visible signs of damage? Insulation adequately protected from water intrusion?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
19	Insulation free of noticeable areas of moisture?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

20	Insulation free of mold?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
21	Free of visible signs of coating failure?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Tank / Piping Release Detection			
22	Is inventory control being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
23	Is release detection being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Other Equipment			
24	Are electrical wiring and boxes in good condition?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
25	Has the cathodic protection system on the tank been tested as required by the designing engineer?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

Additional Comments:

The Dirty Lubrication Oil storage tank appears to be a 10,000-gallon, non-UL Listed single wall aboveground storage tank. Secondary containment is provided by the oil storage room which is of concrete construction with sump pits. The tank appears to be in generally good condition and installed to manufacturer specifications. Due to function and design, there does not appear to be any feasible way to install an emergency vent. The tank does not appear to have a dedicated normal vent but is manifolded with the normal vent on Clean Lube Oil Tank providing limited ventilation. NFPA Placards and content labels should be installed on the storage tank. Liquid level monitoring is provided by an analogue level gauge which appears to be operating as required. Calibration of this gauge should be confirmed the next time the storage tank is emptied for cleaning and servicing. This storage tank does not have a top access ladder installed but can be visually inspected from the adjacent storage tank.

A single wall tank with secondary containment will be considered a Category 1 storage tank under the STI SP001 inspection standard. This tank should continue to be inspected periodically monthly, and annually in accordance with STI SP001 Table of Inspection Schedules. A formal external inspection of this storage tank is required every 20 years and should be performed on this schedule.

Inspection Photos:



Photo 01: Dirty Lubrication Oil Storage Tank



Photo 02: Dirty Lubrication Oil Storage Tank Top View

STI SP001 Annual Inspection Checklist

General Inspection Information: US Army Corps of Engineers Little Goose Dam 2021 SPCC Inspections

Inspection Date: <u>7/28/2021</u>	Prior Inspection Date: _____	Retain until date: <u>7/28/2024</u>
Inspector Name (print): <u>Daniel J Rohde, CHMM</u>	Inspector Signature: <u>Daniel J Rohde</u>	Title: <u>STI SP001 Tank Inspector</u>
Tank(s) inspected ID: <u>Clean Lube Oil Tank</u>	Regulatory facility name and ID number (if applicable) _____	

Inspection Guidance:

- This checklist is intended as a model. Locally developed checklists are acceptable as long as they are substantially equivalent (as applicable).
- For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector per paragraph 4.1.2 of the standard.
- Remove promptly standing water or liquid discovered in the primary tank, secondary containment area, interstice, or spill container. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- In order to comply with EPA SPCC (Spill Prevention, Control and Countermeasure) rules, a facility should regularly test liquid level sensing devices to ensure proper operation (40 CFR 112.8(c)(8)(v)).
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for at least 36 months.
- Complete this checklist on an annual basis, supplemental to the owner monthly-performed inspection checklists.
- **Note: If a change has occurred to the tank system or containment that may affect the SPCC plan, the condition should be evaluated against the current plan requirement by a Professional Engineer knowledgeable in SPCC development and implementation.**

ITEM	STATUS	COMMENTS / DATE CORRECTED
Tank Foundation/Supports		
1	Free of tank settlement or foundation washout?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2	Concrete pad or ring wall free of cracking and spalling?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
3	Tank supports in satisfactory condition?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
4	Is water able to drain away from tank if tank is resting on a foundation or on the ground?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
5	Is the grounding strap between the tank and foundation/supports in good condition?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
Tank Shell, Heads and Roof		
6	Free of visible signs of coating failure?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
7	Free of noticeable distortions, buckling, denting, or bulging?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

8	Free of standing water on roof?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
9	Are all labels and tags intact and legible?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Tank Manways, Piping, and Equipment			
10	Flanged connection bolts tight and fully engaged with no sign of wear or corrosion?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
Tank Equipment			
11	Normal and emergency vents free of obstructions?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
12	Normal vent on tanks storing gasoline equipped with pressure/vacuum vent?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
13	Are flame arrestors free of corrosion and are air passages free of blockage?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
14	Is the emergency vent in good working condition and functional, as required by manufacturer? Consult manufacturer's requirements. Verify that components are moving freely (including long-bolt manways).	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	The storage tank does not have an emergency vent. Due to the design and nature of the storage tank, it will not be feasible to install an emergency vent. A normal vent with a vapor filter has been plumbed from the top of the tank and appears to be installed to manufacturer specifications.
15	Is interstitial leak detection equipment in good condition? Are windows on sight gauges clear? Are wire connections intact? If equipment has a test function, does it activate to confirm operation?"	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
16	Are all valves free of leaks, corrosion and other damage? Follow manufacturers' instructions for regular maintenance of these items. Check the following and verify (as applicable): <input type="checkbox"/> Anti-siphon valve <input type="checkbox"/> Check valve <input type="checkbox"/> Gate valve <input type="checkbox"/> Pressure regulator valve <input type="checkbox"/> Expansion relief valve <input type="checkbox"/> Solenoid valve <input type="checkbox"/> Fire valve <input type="checkbox"/> Shear valve	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
17	Are strainers and filters clean and in good condition?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Insulated Tanks			
18	Free of missing insulation? Insulation free of visible signs of damage? Insulation adequately protected from water intrusion?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
19	Insulation free of noticeable areas of moisture?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

20	Insulation free of mold?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
21	Free of visible signs of coating failure?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Tank / Piping Release Detection			
22	Is inventory control being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
23	Is release detection being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Other Equipment			
24	Are electrical wiring and boxes in good condition?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
25	Has the cathodic protection system on the tank been tested as required by the designing engineer?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

Additional Comments:

The Clean Lubrication Oil storage tank appears to be a 10,000-gallon, non-UL Listed single wall aboveground storage tank. Secondary containment is provided by the oil storage room which is of concrete construction with sump pits. The tank appears to be in generally good condition and installed to manufacturer specifications. Due to function and design, there does not appear to be any feasible way to install an emergency vent. Normal ventilation is provided by vent line with an installed vapor filter. NFPA Placards and content labels should be installed on the storage tank. Liquid level monitoring is provided by an analogue level gauge which appears to be operating as required. Calibration of this gauge should be confirmed the next time the storage tank is emptied for cleaning and servicing. This storage tank does not have a top access ladder installed but can be visually inspected from the top of the adjacent storage tank.

A single wall tank with secondary containment will be considered a Category 1 storage tank under the STI SP001 inspection standard. This tank should continue to be inspected periodically monthly, and annually in accordance with STI SP001 Table of Inspection Schedules. A formal external inspection of this storage tank is required every 20 years and should be performed on this schedule.

Inspection Photos:



Photo 01: Clean Lubrication Oil Storage Tank



Photo 02: Top View of Lubrication Oil Storage Tank

STI SP001 Annual Inspection Checklist

General Inspection Information: US Army Corps of Engineers Little Goose Dam 2021 SPCC Inspections

Inspection Date: <u>7/28/2021</u>	Prior Inspection Date: _____	Retain until date: <u>7/28/2024</u>
Inspector Name (print): <u>Daniel J Rohde, CHMM</u>	Inspector Signature: <u>Daniel J Rohde</u>	Title: <u>STI SP001 Tank Inspector</u>
Tank(s) inspected ID: <u>Dirty Transformer Oil</u>	Regulatory facility name and ID number (if applicable) _____	

Inspection Guidance:

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- In order to comply with EPA SPCC (Spill Prevention, Control and Countermeasure) rules, a facility should regularly test liquid level sensing devices to ensure proper operation (40 CFR 112.8(c)(8)(v)).
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- Retain the completed checklists for at least 36 months.
- Complete this checklist on an annual basis, supplemental to the owner monthly-performed inspection checklists.
- **Note: If a change has occurred to the tank system or containment that may affect the SPCC plan, the condition should be evaluated against the current plan requirement by a Professional Engineer knowledgeable in SPCC development and implementation.**

ITEM		STATUS	COMMENTS / DATE CORRECTED
Tank Foundation/Supports			
1	Free of tank settlement or foundation washout?	☑ Yes ☐ No	
2	Concrete pad or ring wall free of cracking and spalling?	☑ Yes ☐ No ☐ NA	
3	Tank supports in satisfactory condition?	☑ Yes ☐ No ☐ NA	
4	Is water able to drain away from tank if tank is resting on a foundation or on the ground?	☑ Yes ☐ No ☐ NA	
5	Is the grounding strap between the tank and foundation/supports in good condition?	☐ Yes ☐ No ☑ NA	
Tank Shell, Heads and Roof			
6	Free of visible signs of coating failure?	☑ Yes ☐ No ☐ NA	
7	Free of noticeable distortions, buckling, denting, or bulging?	☑ Yes ☐ No	

8	Free of standing water on roof?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
9	Are all labels and tags intact and legible?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Tank Manways, Piping, and Equipment			
10	Flanged connection bolts tight and fully engaged with no sign of wear or corrosion?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
Tank Equipment			
11	Normal and emergency vents free of obstructions?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
12	Normal vent on tanks storing gasoline equipped with pressure/vacuum vent?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
13	Are flame arrestors free of corrosion and are air passages free of blockage?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
14	Is the emergency vent in good working condition and functional, as required by manufacturer? Consult manufacturer's requirements. Verify that components are moving freely (including long-bolt manways).	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	The storage tank does not have an emergency vent. An UL Listed emergency vent should be installed in the available port on top of the storage tank. A normal vent with a vapor filter has been plumbed from the top of the tank and appears to be installed to manufacturer specifications.
15	Is interstitial leak detection equipment in good condition? Are windows on sight gauges clear? Are wire connections intact? If equipment has a test function, does it activate to confirm operation?"	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
16	Are all valves free of leaks, corrosion and other damage? Follow manufacturers' instructions for regular maintenance of these items. Check the following and verify (as applicable): <input type="checkbox"/> Anti-siphon valve <input type="checkbox"/> Check valve <input type="checkbox"/> Gate valve <input type="checkbox"/> Pressure regulator valve <input type="checkbox"/> Expansion relief valve <input type="checkbox"/> Solenoid valve <input type="checkbox"/> Fire valve <input type="checkbox"/> Shear valve	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
17	Are strainers and filters clean and in good condition?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Insulated Tanks			
18	Free of missing insulation? Insulation free of visible signs of damage? Insulation adequately protected from water intrusion?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
19	Insulation free of noticeable areas of moisture?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

20	Insulation free of mold?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
21	Free of visible signs of coating failure?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	The storage tank struts had visible coating failure and corrosion that should be cleaned and resurfaced.
Tank / Piping Release Detection			
22	Is inventory control being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
23	Is release detection being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Other Equipment			
24	Are electrical wiring and boxes in good condition?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
25	Has the cathodic protection system on the tank been tested as required by the designing engineer?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

Additional Comments:

The Dirty Transformer Oil storage tank appears to be a 10,000-gallon, non-UL Listed single wall aboveground storage tank. Secondary containment is provided by the oil storage room which is of concrete construction with sump pits. The tank appears to be in generally good condition and installed to manufacturer specifications. This storage tank does not appear to have an emergency vent, but a small 3-4 inch port is available and a UL Listed emergency vent should be installed if it will not interfere with system function. The tank does not have a dedicated normal vent but is manifolded with the normal vent on the Clean Transformer Oil storage tank providing limited ventilation. Some corrosion and coating failure was observed on the tank struts which should be cleaned and resurfaced when possible. NFPA Placards and content labels should be installed on the storage tank. Liquid level monitoring is provided by an analogue level gauge which appears to be operating as required. Calibration of this gauge should be confirmed the next time the storage tank is emptied for cleaning and servicing.

A single wall tank with secondary containment will be considered a Category 1 storage tank under the STI SP001 inspection standard. This tank should continue to be inspected periodically monthly, and annually in accordance with STI SP001 Table of Inspection Schedules. A formal external inspection of this storage tank is required every 20 years and should be performed on this schedule.

Inspection Photos:



Photo 01: Dirty Transformer Oil Storage Tank



Photo 02: Corrosion Damage on Dirty Transformer Oil Tank Struts



Photo 03: Available Port for Emergency Vent

STI SP001 Annual Inspection Checklist

General Inspection Information: US Army Corps of Engineers Little Goose Dam 2021 SPCC Inspections

Inspection Date: <u>7/28/2021</u>	Prior Inspection Date: _____	Retain until date: <u>7/28/2024</u>
Inspector Name (print): <u>Daniel J Rohde, CHMM</u>	Inspector Signature: <u>Daniel J Rohde</u>	Title: <u>STI SP001 Tank Inspector</u>
Tank(s) inspected ID: <u>Clean Transformer Oil</u>	Regulatory facility name and ID number (if applicable) _____	

Inspection Guidance:

- This checklist is intended as a model. Locally developed checklists are acceptable as long as they are substantially equivalent (as applicable).
- For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector per paragraph 4.1.2 of the standard.
- Remove promptly standing water or liquid discovered in the primary tank, secondary containment area, interstice, or spill container. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- In order to comply with EPA SPCC (Spill Prevention, Control and Countermeasure) rules, a facility should regularly test liquid level sensing devices to ensure proper operation (40 CFR 112.8(c)(8)(v)).
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for at least 36 months.
- Complete this checklist on an annual basis, supplemental to the owner monthly-performed inspection checklists.
- **Note: If a change has occurred to the tank system or containment that may affect the SPCC plan, the condition should be evaluated against the current plan requirement by a Professional Engineer knowledgeable in SPCC development and implementation.**

ITEM		STATUS	COMMENTS / DATE CORRECTED
Tank Foundation/Supports			
1	Free of tank settlement or foundation washout?	☑ Yes ☐ No	
2	Concrete pad or ring wall free of cracking and spalling?	☑ Yes ☐ No ☐ NA	
3	Tank supports in satisfactory condition?	☑ Yes ☐ No ☐ NA	
4	Is water able to drain away from tank if tank is resting on a foundation or on the ground?	☑ Yes ☐ No ☐ NA	
5	Is the grounding strap between the tank and foundation/supports in good condition?	☐ Yes ☐ No ☑ NA	
Tank Shell, Heads and Roof			
6	Free of visible signs of coating failure?	☑ Yes ☐ No ☐ NA	
7	Free of noticeable distortions, buckling, denting, or bulging?	☑ Yes ☐ No	

8	Free of standing water on roof?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
9	Are all labels and tags intact and legible?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Tank Manways, Piping, and Equipment			
10	Flanged connection bolts tight and fully engaged with no sign of wear or corrosion?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
Tank Equipment			
11	Normal and emergency vents free of obstructions?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
12	Normal vent on tanks storing gasoline equipped with pressure/vacuum vent?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
13	Are flame arrestors free of corrosion and are air passages free of blockage?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
14	Is the emergency vent in good working condition and functional, as required by manufacturer? Consult manufacturer's requirements. Verify that components are moving freely (including long-bolt manways).	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	The storage tank does not have a dedicated emergency vent. An emergency vent could be installed in an available port on top of the storage tank.
15	Is interstitial leak detection equipment in good condition? Are windows on sight gauges clear? Are wire connections intact? If equipment has a test function, does it activate to confirm operation?"	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
16	Are all valves free of leaks, corrosion and other damage? Follow manufacturers' instructions for regular maintenance of these items. Check the following and verify (as applicable): <input type="checkbox"/> Anti-siphon valve <input type="checkbox"/> Check valve <input type="checkbox"/> Gate valve <input type="checkbox"/> Pressure regulator valve <input type="checkbox"/> Expansion relief valve <input type="checkbox"/> Solenoid valve <input type="checkbox"/> Fire valve <input type="checkbox"/> Shear valve	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
17	Are strainers and filters clean and in good condition?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Insulated Tanks			
18	Free of missing insulation? Insulation free of visible signs of damage? Insulation adequately protected from water intrusion?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
19	Insulation free of noticeable areas of moisture?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

20	Insulation free of mold?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
21	Free of visible signs of coating failure?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Tank / Piping Release Detection			
22	Is inventory control being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
23	Is release detection being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Other Equipment			
24	Are electrical wiring and boxes in good condition?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
25	Has the cathodic protection system on the tank been tested as required by the designing engineer?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

Additional Comments:

The Clean Transformer Oil storage tank appears to be a 10,000-gallon, non-UL Listed single wall aboveground storage tank. Secondary containment is provided by the oil storage room which is of concrete construction with sump pits. The tank appears to be in generally good condition and installed to manufacturer specifications. This storage tank does not appear to have an emergency vent, but a small 3-4 inch port is available and a UL Listed emergency vent should be installed if it will not interfere with function. Normal ventilation is provided by a vent line with an installed vapor filter. NFPA Placards and content labels should be installed on the storage tank. Liquid level monitoring is provided by an analogue level gauge which appears to be operating as required. Calibration of this gauge should be confirmed the next time the storage tank is emptied for cleaning and servicing.

A single wall tank with secondary containment will be considered a Category 1 storage tank under the STI SP001 inspection standard. This tank should continue to be inspected periodically monthly, and annually in accordance with STI SP001 Table of Inspection Schedules. A formal external inspection of this storage tank is required every 20 years and should be performed on this schedule.

Inspection Photos:

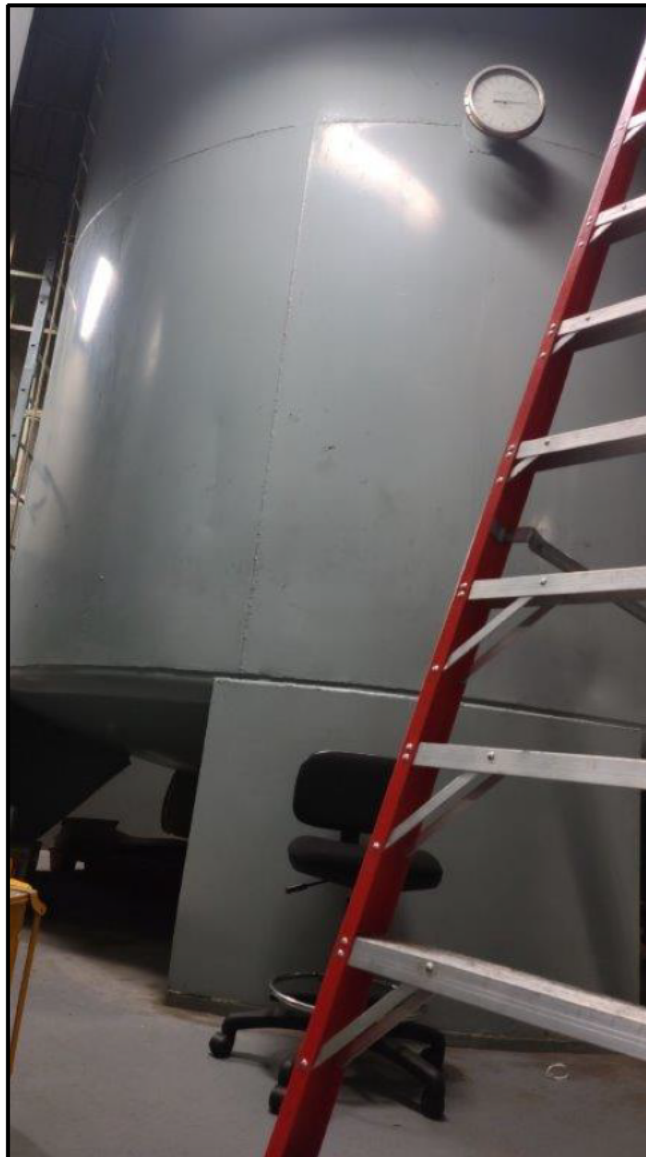


Photo 01: Clean Transformer Oil Storage Tank



Photo 02: Available Port for Emergency Vent on Clean Transformer Oil Tank

STI SP001 Annual Inspection Checklist

General Inspection Information: US Army Corps of Engineers Little Goose Dam 2021 SPCC Inspections

Inspection Date: <u>7/28/2021</u>	Prior Inspection Date: _____	Retain until date: <u>7/28/2024</u>
Inspector Name (print): <u>Daniel J Rohde, CHMM</u>	Inspector Signature: <u>Daniel J Rohde</u>	Title: <u>STI SP001 Tank Inspector</u>
Tank(s) inspected ID: <u>Oil Water Separator Tank</u>	Regulatory facility name and ID number (if applicable) _____	

Inspection Guidance:

- This checklist is intended as a model. Locally developed checklists are acceptable as long as they are substantially equivalent (as applicable).
- For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector per paragraph 4.1.2 of the standard.
- Remove promptly standing water or liquid discovered in the primary tank, secondary containment area, interstice, or spill container. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- In order to comply with EPA SPCC (Spill Prevention, Control and Countermeasure) rules, a facility should regularly test liquid level sensing devices to ensure proper operation (40 CFR 112.8(c)(8)(v)).
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for at least 36 months.
- Complete this checklist on an annual basis, supplemental to the owner monthly-performed inspection checklists.
- **Note: If a change has occurred to the tank system or containment that may affect the SPCC plan, the condition should be evaluated against the current plan requirement by a Professional Engineer knowledgeable in SPCC development and implementation.**

ITEM	STATUS	COMMENTS / DATE CORRECTED
Tank Foundation/Supports		
1	Free of tank settlement or foundation washout?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2	Concrete pad or ring wall free of cracking and spalling?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
3	Tank supports in satisfactory condition?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
4	Is water able to drain away from tank if tank is resting on a foundation or on the ground?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
5	Is the grounding strap between the tank and foundation/supports in good condition?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Tank Shell, Heads and Roof		
6	Free of visible signs of coating failure?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
7	Free of noticeable distortions, buckling, denting, or bulging?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

8	Free of standing water on roof?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
9	Are all labels and tags intact and legible?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Tank Manways, Piping, and Equipment			
10	Flanged connection bolts tight and fully engaged with no sign of wear or corrosion?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
Tank Equipment			
11	Normal and emergency vents free of obstructions?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	This storage tank does not have normal or emergency vents.
12	Normal vent on tanks storing gasoline equipped with pressure/vacuum vent?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
13	Are flame arrestors free of corrosion and are air passages free of blockage?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
14	Is the emergency vent in good working condition and functional, as required by manufacturer? Consult manufacturer's requirements. Verify that components are moving freely (including long-bolt manways).	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	This storage tank does not have an emergency vent.
15	Is interstitial leak detection equipment in good condition? Are windows on sight gauges clear? Are wire connections intact? If equipment has a test function, does it activate to confirm operation?"	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	A liquid level gauge has been installed in place of an interstice leak detector.
16	Are all valves free of leaks, corrosion and other damage? Follow manufacturers' instructions for regular maintenance of these items. Check the following and verify (as applicable): <input type="checkbox"/> Anti-siphon valve <input type="checkbox"/> Check valve <input type="checkbox"/> Gate valve <input type="checkbox"/> Pressure regulator valve <input type="checkbox"/> Expansion relief valve <input type="checkbox"/> Solenoid valve <input type="checkbox"/> Fire valve <input type="checkbox"/> Shear valve	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
17	Are strainers and filters clean and in good condition?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Insulated Tanks			
18	Free of missing insulation? Insulation free of visible signs of damage? Insulation adequately protected from water intrusion?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
19	Insulation free of noticeable areas of moisture?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

20	Insulation free of mold?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
21	Free of visible signs of coating failure?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Tank / Piping Release Detection			
22	Is inventory control being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
23	Is release detection being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Other Equipment			
24	Are electrical wiring and boxes in good condition?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
25	Has the cathodic protection system on the tank been tested as required by the designing engineer?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

Additional Comments:

The oil water separator tank appears to be a Design Tanks brand 320-gallon double-walled polyester resin storage tank. The storage tank has neither normal nor emergency vents but appears to be installed to manufacturer specifications and is in generally excellent condition. There is an available port on top of the tank that could be utilized for emergency ventilation if it does not interfere with tank function. A level gauge has been installed on the interstitial space monitoring port instead of a leak detector but appears to be functioning adequately for leak detection.

This Category 1 storage tank should continue to be inspected periodically monthly and annually in accordance with the STI SP001 Table of Inspection Schedules.

Inspection Photos:

Annual Checklist



Photo 01: Oil Water Separator Tank



Photo 02: Curved Down Port on Left Top of Tank is Potential E-Vent Installation Location

STI SP001 Annual Inspection Checklist

General Inspection Information: US Army Corps of Engineers Little Goose Dam 2021 SPCC Inspections

Inspection Date: <u>7/28/2021</u>	Prior Inspection Date: _____	Retain until date: <u>7/28/2024</u>
Inspector Name (print): <u>Daniel J Rohde, CHMM</u>	Inspector Signature: <u>Daniel J Rohde</u>	Title: <u>STI SP001 Tank Inspector</u>
Tank(s) inspected ID: <u>Skimmer Oil Tank</u>	Regulatory facility name and ID number (if applicable) _____	

Inspection Guidance:

- This checklist is intended as a model. Locally developed checklists are acceptable as long as they are substantially equivalent (as applicable).
- For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector per paragraph 4.1.2 of the standard.
- Remove promptly standing water or liquid discovered in the primary tank, secondary containment area, interstice, or spill container. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- In order to comply with EPA SPCC (Spill Prevention, Control and Countermeasure) rules, a facility should regularly test liquid level sensing devices to ensure proper operation (40 CFR 112.8(c)(8)(v)).
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for at least 36 months.
- Complete this checklist on an annual basis, supplemental to the owner monthly-performed inspection checklists.
- **Note: If a change has occurred to the tank system or containment that may affect the SPCC plan, the condition should be evaluated against the current plan requirement by a Professional Engineer knowledgeable in SPCC development and implementation.**

ITEM		STATUS	COMMENTS / DATE CORRECTED
Tank Foundation/Supports			
1	Free of tank settlement or foundation washout?	☑ Yes ☐ No	
2	Concrete pad or ring wall free of cracking and spalling?	☑ Yes ☐ No ☐ NA	
3	Tank supports in satisfactory condition?	☑ Yes ☐ No ☐ NA	
4	Is water able to drain away from tank if tank is resting on a foundation or on the ground?	☑ Yes ☐ No ☐ NA	
5	Is the grounding strap between the tank and foundation/supports in good condition?	☑ Yes ☐ No ☐ NA	
Tank Shell, Heads and Roof			
6	Free of visible signs of coating failure?	☑ Yes ☐ No ☐ NA	
7	Free of noticeable distortions, buckling, denting, or bulging?	☑ Yes ☐ No	

8	Free of standing water on roof?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
9	Are all labels and tags intact and legible?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Tank Manways, Piping, and Equipment			
10	Flanged connection bolts tight and fully engaged with no sign of wear or corrosion?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
Tank Equipment			
11	Normal and emergency vents free of obstructions?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
12	Normal vent on tanks storing gasoline equipped with pressure/vacuum vent?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
13	Are flame arrestors free of corrosion and are air passages free of blockage?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
14	Is the emergency vent in good working condition and functional, as required by manufacturer? Consult manufacturer's requirements. Verify that components are moving freely (including long-bolt manways).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
15	Is interstitial leak detection equipment in good condition? Are windows on sight gauges clear? Are wire connections intact? If equipment has a test function, does it activate to confirm operation?"	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
16	<p>Are all valves free of leaks, corrosion and other damage? Follow manufacturers' instructions for regular maintenance of these items. Check the following and verify (as applicable):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Anti-siphon valve <input type="checkbox"/> Check valve <input type="checkbox"/> Gate valve <input type="checkbox"/> Pressure regulator valve <input type="checkbox"/> Expansion relief valve <input type="checkbox"/> Solenoid valve <input type="checkbox"/> Fire valve <input type="checkbox"/> Shear valve 	<ul style="list-style-type: none"> <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A 	
17	Are strainers and filters clean and in good condition?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Insulated Tanks			
18	Free of missing insulation? Insulation free of visible signs of damage? Insulation adequately protected from water intrusion?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
19	Insulation free of noticeable areas of moisture?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

Inspection Photos:



Photo 01: Skimmer Oil Storage Tank



Photo 02: Chronic Leak from Fill Line Fitting

STI SP001 Annual Inspection Checklist

General Inspection Information: US Army Corps of Engineers Little Goose Dam 2021 SPCC Inspections

Inspection Date: <u>7/28/2021</u>	Prior Inspection Date: _____	Retain until date: <u>7/28/2024</u>
Inspector Name (print): <u>Daniel J Rohde, CHMM</u>	Inspector Signature: <u>Daniel J Rohde</u>	Title: <u>STI SP001 Tank Inspector</u>
Tank(s) inspected ID: <u>Emergency Generator Tank</u>	Regulatory facility name and ID number (if applicable) _____	

Inspection Guidance:

- This checklist is intended as a model. Locally developed checklists are acceptable as long as they are substantially equivalent (as applicable).
- For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector per paragraph 4.1.2 of the standard.
- Remove promptly standing water or liquid discovered in the primary tank, secondary containment area, interstice, or spill container. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- In order to comply with EPA SPCC (Spill Prevention, Control and Countermeasure) rules, a facility should regularly test liquid level sensing devices to ensure proper operation (40 CFR 112.8(c)(8)(v)).
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for at least 36 months.
- Complete this checklist on an annual basis, supplemental to the owner monthly-performed inspection checklists.
- **Note: If a change has occurred to the tank system or containment that may affect the SPCC plan, the condition should be evaluated against the current plan requirement by a Professional Engineer knowledgeable in SPCC development and implementation.**

ITEM		STATUS	COMMENTS / DATE CORRECTED
Tank Foundation/Supports			
1	Free of tank settlement or foundation washout?	☑ Yes ☐ No	
2	Concrete pad or ring wall free of cracking and spalling?	☑ Yes ☐ No ☐ NA	
3	Tank supports in satisfactory condition?	☑ Yes ☐ No ☐ NA	
4	Is water able to drain away from tank if tank is resting on a foundation or on the ground?	☑ Yes ☐ No ☐ NA	
5	Is the grounding strap between the tank and foundation/supports in good condition?	☐ Yes ☐ No ☑ NA	
Tank Shell, Heads and Roof			
6	Free of visible signs of coating failure?	☑ Yes ☐ No ☐ NA	
7	Free of noticeable distortions, buckling, denting, or bulging?	☑ Yes ☐ No	

8	Free of standing water on roof?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
9	Are all labels and tags intact and legible?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Tank Manways, Piping, and Equipment			
10	Flanged connection bolts tight and fully engaged with no sign of wear or corrosion?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
Tank Equipment			
11	Normal and emergency vents free of obstructions?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
12	Normal vent on tanks storing gasoline equipped with pressure/vacuum vent?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
13	Are flame arrestors free of corrosion and are air passages free of blockage?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
14	Is the emergency vent in good working condition and functional, as required by manufacturer? Consult manufacturer's requirements. Verify that components are moving freely (including long-bolt manways).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
15	Is interstitial leak detection equipment in good condition? Are windows on sight gauges clear? Are wire connections intact? If equipment has a test function, does it activate to confirm operation?"	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	Some diesel was observed inside the interstitial space, possibly from an accidental filling during installation. The level does not appear high enough to trip the leak detector sensor, but proper function should be tested and confirmed.
16	Are all valves free of leaks, corrosion and other damage? Follow manufacturers' instructions for regular maintenance of these items. Check the following and verify (as applicable): <input type="checkbox"/> Anti-siphon valve <input type="checkbox"/> Check valve <input type="checkbox"/> Gate valve <input type="checkbox"/> Pressure regulator valve <input type="checkbox"/> Expansion relief valve <input type="checkbox"/> Solenoid valve <input type="checkbox"/> Fire valve <input type="checkbox"/> Shear valve	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
17	Are strainers and filters clean and in good condition?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Insulated Tanks			
18	Free of missing insulation? Insulation free of visible signs of damage? Insulation adequately protected from water intrusion?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
19	Insulation free of noticeable areas of moisture?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

20	Insulation free of mold?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
21	Free of visible signs of coating failure?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Tank / Piping Release Detection			
22	Is inventory control being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
23	Is release detection being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Other Equipment			
24	Are electrical wiring and boxes in good condition?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
25	Has the cathodic protection system on the tank been tested as required by the designing engineer?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

Additional Comments:

The Emergency Diesel Generator Day Tank appears to be a 600-gallon UL142 style double walled storage tank. It appeared to be in generally excellent condition and installed to manufacturer specifications. Some free diesel was observed inside the interstitial space from the emergency vent. It is possible that this fuel was from an accidental fill immediately after installation or during initial testing of the unit, but the interstice should be cleaned and continually monitored during monthly periodic inspections to confirm the primary tank is not leaking. Access to the interstice for cleaning should be possible through the emergency vent port. If any fuel is observed in the interstice after cleaning, the tank should be leak tested immediately by a qualified inspector. Observed fuel in the interstice was probably not enough to contact the leak detector sensor, but the unit should be checked to confirm proper function.

This Category 1 storage tank should continue to be inspected periodically monthly and annually in accordance with the STI SP001 Table of Inspection Schedules.

Inspection Photos:



Photo 01: Powerhouse Emergency Generator Day Tank

STI SP001 Annual Inspection Checklist

General Inspection Information: US Army Corps of Engineers Little Goose Dam 2021 SPCC Inspections

Inspection Date: <u>7/28/2021</u>	Prior Inspection Date: _____	Retain until date: <u>7/28/2024</u>
Inspector Name (print): <u>Daniel J Rohde, CHMM</u>	Inspector Signature: <u>Daniel J Rohde</u>	Title: <u>STI SP001 Tank Inspector</u>
Tank(s) inspected ID: <u>Diesel Storage Tank</u>	Regulatory facility name and ID number (if applicable) _____	

Inspection Guidance:

- This checklist is intended as a model. Locally developed checklists are acceptable as long as they are substantially equivalent (as applicable).
- For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector per paragraph 4.1.2 of the standard.
- Remove promptly standing water or liquid discovered in the primary tank, secondary containment area, interstice, or spill container. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- In order to comply with EPA SPCC (Spill Prevention, Control and Countermeasure) rules, a facility should regularly test liquid level sensing devices to ensure proper operation (40 CFR 112.8(c)(8)(v)).
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for at least 36 months.
- Complete this checklist on an annual basis, supplemental to the owner monthly-performed inspection checklists.
- **Note: If a change has occurred to the tank system or containment that may affect the SPCC plan, the condition should be evaluated against the current plan requirement by a Professional Engineer knowledgeable in SPCC development and implementation.**

ITEM		STATUS	COMMENTS / DATE CORRECTED
Tank Foundation/Supports			
1	Free of tank settlement or foundation washout?	☑ Yes ☐ No	
2	Concrete pad or ring wall free of cracking and spalling?	☑ Yes ☐ No ☐ NA	
3	Tank supports in satisfactory condition?	☑ Yes ☐ No ☐ NA	
4	Is water able to drain away from tank if tank is resting on a foundation or on the ground?	☑ Yes ☐ No ☐ NA	
5	Is the grounding strap between the tank and foundation/supports in good condition?	☑ Yes ☐ No ☐ NA	
Tank Shell, Heads and Roof			
6	Free of visible signs of coating failure?	☑ Yes ☐ No ☐ NA	
7	Free of noticeable distortions, buckling, denting, or bulging?	☑ Yes ☐ No	

8	Free of standing water on roof?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
9	Are all labels and tags intact and legible?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Tank Manways, Piping, and Equipment			
10	Flanged connection bolts tight and fully engaged with no sign of wear or corrosion?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
Tank Equipment			
11	Normal and emergency vents free of obstructions?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
12	Normal vent on tanks storing gasoline equipped with pressure/vacuum vent?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
13	Are flame arrestors free of corrosion and are air passages free of blockage?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
14	Is the emergency vent in good working condition and functional, as required by manufacturer? Consult manufacturer's requirements. Verify that components are moving freely (including long-bolt manways).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
15	Is interstitial leak detection equipment in good condition? Are windows on sight gauges clear? Are wire connections intact? If equipment has a test function, does it activate to confirm operation?"	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
16	Are all valves free of leaks, corrosion and other damage? Follow manufacturers' instructions for regular maintenance of these items. Check the following and verify (as applicable): <input type="checkbox"/> Anti-siphon valve <input type="checkbox"/> Check valve <input type="checkbox"/> Gate valve <input type="checkbox"/> Pressure regulator valve <input type="checkbox"/> Expansion relief valve <input type="checkbox"/> Solenoid valve <input type="checkbox"/> Fire valve <input type="checkbox"/> Shear valve	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
17	Are strainers and filters clean and in good condition?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Insulated Tanks			
18	Free of missing insulation? Insulation free of visible signs of damage? Insulation adequately protected from water intrusion?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
19	Insulation free of noticeable areas of moisture?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

20	Insulation free of mold?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
21	Free of visible signs of coating failure?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Tank / Piping Release Detection			
22	Is inventory control being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
23	Is release detection being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Other Equipment			
24	Are electrical wiring and boxes in good condition?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
25	Has the cathodic protection system on the tank been tested as required by the designing engineer?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

Additional Comments:

Diesel Storage Tank appears to be a 3000-gallon UL142 style closed top diked storage tank. It appears to be in generally excellent condition and installed to manufacturer specifications inside a covered tertiary containment. The tank has adequate normal ventilation and emergency venting for the primary tank and interstice are provided via correctly installed long-bolt manway.

This Category 1 storage tank should continue to be inspected periodically monthly and annually in accordance with the STI SP001 Table of Inspection Schedules.

Inspection Photos:



Photo 01: Diesel Storage Tank

STI SP001 Annual Inspection Checklist

General Inspection Information: US Army Corps of Engineers Little Goose Dam 2021 SPCC Inspections

Inspection Date: <u>7/28/2021</u>	Prior Inspection Date: _____	Retain until date: <u>7/28/2024</u>
Inspector Name (print): <u>Daniel J Rohde, CHMM</u>	Inspector Signature: <u>Daniel J Rohde</u>	Title: <u>STI SP001 Tank Inspector</u>
Tank(s) inspected ID: <u>Gravity Lube Oil Tank</u>	Regulatory facility name and ID number (if applicable) _____	

Inspection Guidance:

- This checklist is intended as a model. Locally developed checklists are acceptable as long as they are substantially equivalent (as applicable).
- For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector per paragraph 4.1.2 of the standard.
- Remove promptly standing water or liquid discovered in the primary tank, secondary containment area, interstice, or spill container. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- In order to comply with EPA SPCC (Spill Prevention, Control and Countermeasure) rules, a facility should regularly test liquid level sensing devices to ensure proper operation (40 CFR 112.8(c)(8)(v)).
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for at least 36 months.
- Complete this checklist on an annual basis, supplemental to the owner monthly-performed inspection checklists.
- **Note: If a change has occurred to the tank system or containment that may affect the SPCC plan, the condition should be evaluated against the current plan requirement by a Professional Engineer knowledgeable in SPCC development and implementation.**

	ITEM	STATUS	COMMENTS / DATE CORRECTED
Tank Foundation/Supports			
1	Free of tank settlement or foundation washout?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
2	Concrete pad or ring wall free of cracking and spalling?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
3	Tank supports in satisfactory condition?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
4	Is water able to drain away from tank if tank is resting on a foundation or on the ground?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
5	Is the grounding strap between the tank and foundation/supports in good condition?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Tank Shell, Heads and Roof			
6	Free of visible signs of coating failure?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
7	Free of noticeable distortions, buckling, denting, or bulging?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

8	Free of standing water on roof?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
9	Are all labels and tags intact and legible?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Tank Manways, Piping, and Equipment			
10	Flanged connection bolts tight and fully engaged with no sign of wear or corrosion?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
Tank Equipment			
11	Normal and emergency vents free of obstructions?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
12	Normal vent on tanks storing gasoline equipped with pressure/vacuum vent?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
13	Are flame arrestors free of corrosion and are air passages free of blockage?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
14	Is the emergency vent in good working condition and functional, as required by manufacturer? Consult manufacturer's requirements. Verify that components are moving freely (including long-bolt manways).	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	This tank does not have an emergency vent installed. Due to design and service requirements, it may not be feasible to install an emergency vent.
15	Is interstitial leak detection equipment in good condition? Are windows on sight gauges clear? Are wire connections intact? If equipment has a test function, does it activate to confirm operation?"	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
16	Are all valves free of leaks, corrosion and other damage? Follow manufacturers' instructions for regular maintenance of these items. Check the following and verify (as applicable): <input type="checkbox"/> Anti-siphon valve <input type="checkbox"/> Check valve <input type="checkbox"/> Gate valve <input type="checkbox"/> Pressure regulator valve <input type="checkbox"/> Expansion relief valve <input type="checkbox"/> Solenoid valve <input type="checkbox"/> Fire valve <input type="checkbox"/> Shear valve	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
17	Are strainers and filters clean and in good condition?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Insulated Tanks			
18	Free of missing insulation? Insulation free of visible signs of damage? Insulation adequately protected from water intrusion?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
19	Insulation free of noticeable areas of moisture?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

20	Insulation free of mold?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
21	Free of visible signs of coating failure?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Tank / Piping Release Detection			
22	Is inventory control being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
23	Is release detection being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Other Equipment			
24	Are electrical wiring and boxes in good condition?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
25	Has the cathodic protection system on the tank been tested as required by the designing engineer?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

Additional Comments:

Gravity Lube Oil Tank appears to be a 500-gallon, non-UL Listed single wall aboveground storage tank. Secondary containment is provided by the oil storage room which is of concrete construction with sump pits. The storage tank appears to be in generally good condition and installed to manufacturer specifications. Due to function and design, there may not be any feasible way to install an emergency vent. NFPA placards and contents label should be added to the tank.

A single wall tank with secondary containment will be considered a Category 1 storage tank under the STI SP001 inspection standard. This tank should continue to be inspected periodically, monthly, and annually in accordance with STI SP001 Table of Inspection Schedules.

Inspection Photos:



Photo 01: Gravity Lube Oil Tank

STI SP001 Annual Inspection Checklist

General Inspection Information: US Army Corps of Engineers Little Goose Dam 2021 SPCC Inspections

Inspection Date: <u>7/28/2021</u>	Prior Inspection Date: _____	Retain until date: <u>7/28/2024</u>
Inspector Name (print): <u>Daniel J Rohde, CHMM</u>	Inspector Signature: <u>Daniel J Rohde</u>	Title: <u>STI SP001 Tank Inspector</u>
Tank(s) inspected ID: <u>Headgate Hydraulic Tank</u>	Regulatory facility name and ID number (if applicable) _____	

Inspection Guidance:

- This checklist is intended as a model. Locally developed checklists are acceptable as long as they are substantially equivalent (as applicable).
- For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector per paragraph 4.1.2 of the standard.
- Remove promptly standing water or liquid discovered in the primary tank, secondary containment area, interstice, or spill container. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- In order to comply with EPA SPCC (Spill Prevention, Control and Countermeasure) rules, a facility should regularly test liquid level sensing devices to ensure proper operation (40 CFR 112.8(c)(8)(v)).
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for at least 36 months.
- Complete this checklist on an annual basis, supplemental to the owner monthly-performed inspection checklists.
- **Note: If a change has occurred to the tank system or containment that may affect the SPCC plan, the condition should be evaluated against the current plan requirement by a Professional Engineer knowledgeable in SPCC development and implementation.**

ITEM		STATUS	COMMENTS / DATE CORRECTED
Tank Foundation/Supports			
1	Free of tank settlement or foundation washout?	☑ Yes ☐ No	
2	Concrete pad or ring wall free of cracking and spalling?	☑ Yes ☐ No ☐ NA	
3	Tank supports in satisfactory condition?	☑ Yes ☐ No ☐ NA	
4	Is water able to drain away from tank if tank is resting on a foundation or on the ground?	☑ Yes ☐ No ☐ NA	
5	Is the grounding strap between the tank and foundation/supports in good condition?	☑ Yes ☐ No ☐ NA	
Tank Shell, Heads and Roof			
6	Free of visible signs of coating failure?	☑ Yes ☐ No ☐ NA	
7	Free of noticeable distortions, buckling, denting, or bulging?	☑ Yes ☐ No	

8	Free of standing water on roof?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
9	Are all labels and tags intact and legible?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Tank Manways, Piping, and Equipment			
10	Flanged connection bolts tight and fully engaged with no sign of wear or corrosion?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
Tank Equipment			
11	Normal and emergency vents free of obstructions?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
12	Normal vent on tanks storing gasoline equipped with pressure/vacuum vent?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
13	Are flame arrestors free of corrosion and are air passages free of blockage?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
14	Is the emergency vent in good working condition and functional, as required by manufacturer? Consult manufacturer's requirements. Verify that components are moving freely (including long-bolt manways).	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	Interstice has no emergency vent. Emergency venting for the primary tank should be provided via long-bolt manway, but the bolts are tightened down and should be loosened to allow free travel.
15	Is interstitial leak detection equipment in good condition? Are windows on sight gauges clear? Are wire connections intact? If equipment has a test function, does it activate to confirm operation?"	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
16	Are all valves free of leaks, corrosion and other damage? Follow manufacturers' instructions for regular maintenance of these items. Check the following and verify (as applicable): <input type="checkbox"/> Anti-siphon valve <input type="checkbox"/> Check valve <input type="checkbox"/> Gate valve <input type="checkbox"/> Pressure regulator valve <input type="checkbox"/> Expansion relief valve <input type="checkbox"/> Solenoid valve <input type="checkbox"/> Fire valve <input type="checkbox"/> Shear valve	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
17	Are strainers and filters clean and in good condition?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Insulated Tanks			
18	Free of missing insulation? Insulation free of visible signs of damage? Insulation adequately protected from water intrusion?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
19	Insulation free of noticeable areas of moisture?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

20	Insulation free of mold?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
21	Free of visible signs of coating failure?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Tank / Piping Release Detection			
22	Is inventory control being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
23	Is release detection being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Other Equipment			
24	Are electrical wiring and boxes in good condition?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
25	Has the cathodic protection system on the tank been tested as required by the designing engineer?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

Additional Comments:

The Headgate Hydraulic Tank appears to be a UL Listed UL142 style double wall storage tank. Normal ventilation is provided via a port with vapor filter but the tank, as configured, does not have adequate emergency ventilation. As designed, emergency ventilation for the primary tank should be provided via long-bolt manway, but the manway bolts are too short to provide sufficient free travel and have been tightened down. For a manway hatch to be utilized as an emergency vent, long bolts should be installed in half of the available manway cover holes and left loose with at least 1.5" of free travel for the manway cover. The interstitial space also has no emergency vent. A possible unused port to the interstice is located next to the manway. This port should be opened to confirm it connects to the interstitial space, and if so, an UL Listed emergency vent installed to provide emergency ventilation. NFPA placards and contents labels should be installed on the storage tank.

This Category 1 storage tank should continue to be inspected periodically monthly and annually in accordance with the STI SP001 Table of Inspection Schedules.

Inspection Photos:



Photo 01: Headgate Hydraulic Tank



Photo 02: Available Port to Interstice and Manway



Photo 03: Manway Bolts Tightened Down Restricting Emergency Venting

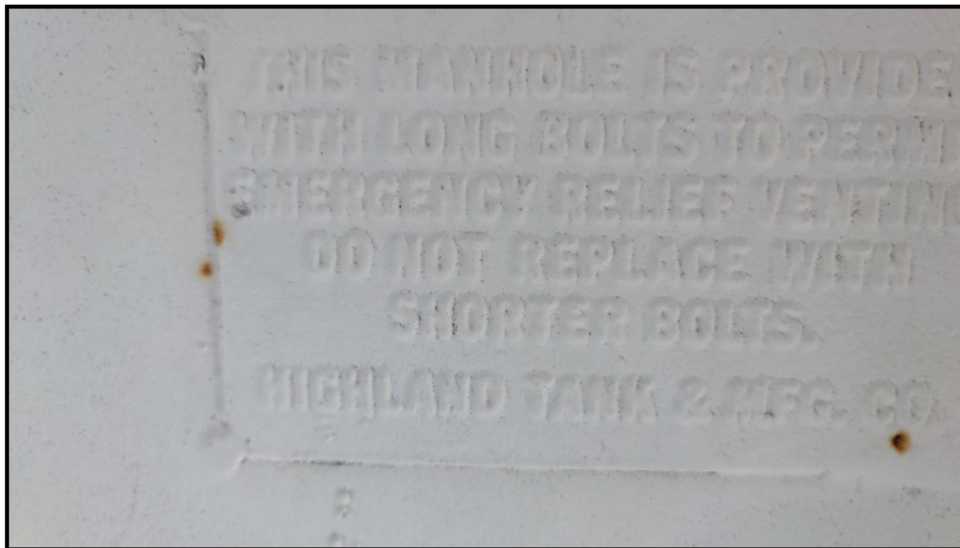


Photo 04: Long Bolt Manway Verbiage

STI SP001 Annual Inspection Checklist

General Inspection Information: US Army Corps of Engineers Little Goose Dam 2021 SPCC Inspections

Inspection Date: <u>7/28/2021</u>	Prior Inspection Date: _____	Retain until date: <u>7/28/2024</u>
Inspector Name (print): <u>Daniel J Rohde, CHMM</u>	Inspector Signature: <u>Daniel J Rohde</u>	Title: <u>STI SP001 Tank Inspector</u>
Tank(s) inspected ID: <u>Intake Crane Diesel Fuel Tank</u>	Regulatory facility name and ID number (if applicable) _____	

Inspection Guidance:

- This checklist is intended as a model. Locally developed checklists are acceptable as long as they are substantially equivalent (as applicable).
- For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector per paragraph 4.1.2 of the standard.
- Remove promptly standing water or liquid discovered in the primary tank, secondary containment area, interstice, or spill container. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- In order to comply with EPA SPCC (Spill Prevention, Control and Countermeasure) rules, a facility should regularly test liquid level sensing devices to ensure proper operation (40 CFR 112.8(c)(8)(v)).
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for at least 36 months.
- Complete this checklist on an annual basis, supplemental to the owner monthly-performed inspection checklists.
- **Note: If a change has occurred to the tank system or containment that may affect the SPCC plan, the condition should be evaluated against the current plan requirement by a Professional Engineer knowledgeable in SPCC development and implementation.**

ITEM		STATUS	COMMENTS / DATE CORRECTED
Tank Foundation/Supports			
1	Free of tank settlement or foundation washout?	☑ Yes ☐ No	
2	Concrete pad or ring wall free of cracking and spalling?	☑ Yes ☐ No ☐ NA	
3	Tank supports in satisfactory condition?	☑ Yes ☐ No ☐ NA	
4	Is water able to drain away from tank if tank is resting on a foundation or on the ground?	☑ Yes ☐ No ☐ NA	
5	Is the grounding strap between the tank and foundation/supports in good condition?	☑ Yes ☐ No ☐ NA	
Tank Shell, Heads and Roof			
6	Free of visible signs of coating failure?	☑ Yes ☐ No ☐ NA	
7	Free of noticeable distortions, buckling, denting, or bulging?	☑ Yes ☐ No	

8	Free of standing water on roof?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
9	Are all labels and tags intact and legible?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Tank Manways, Piping, and Equipment			
10	Flanged connection bolts tight and fully engaged with no sign of wear or corrosion?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
Tank Equipment			
11	Normal and emergency vents free of obstructions?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
12	Normal vent on tanks storing gasoline equipped with pressure/vacuum vent?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
13	Are flame arrestors free of corrosion and are air passages free of blockage?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
14	Is the emergency vent in good working condition and functional, as required by manufacturer? Consult manufacturer's requirements. Verify that components are moving freely (including long-bolt manways).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
15	Is interstitial leak detection equipment in good condition? Are windows on sight gauges clear? Are wire connections intact? If equipment has a test function, does it activate to confirm operation?"	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
16	Are all valves free of leaks, corrosion and other damage? Follow manufacturers' instructions for regular maintenance of these items. Check the following and verify (as applicable): <input type="checkbox"/> Anti-siphon valve <input type="checkbox"/> Check valve <input type="checkbox"/> Gate valve <input type="checkbox"/> Pressure regulator valve <input type="checkbox"/> Expansion relief valve <input type="checkbox"/> Solenoid valve <input type="checkbox"/> Fire valve <input type="checkbox"/> Shear valve	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
17	Are strainers and filters clean and in good condition?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Insulated Tanks			
18	Free of missing insulation? Insulation free of visible signs of damage? Insulation adequately protected from water intrusion?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
19	Insulation free of noticeable areas of moisture?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

Inspection Photos:



Photo 01: Intake Crane Diesel Fuel Tank

STI SP001 Annual Inspection Checklist

General Inspection Information: US Army Corps of Engineers Little Goose Dam 2021 SPCC Inspections

Inspection Date: <u>7/28/2021</u>	Prior Inspection Date: _____	Retain until date: <u>7/28/2024</u>
Inspector Name (print): <u>Daniel J Rohde, CHMM</u>	Inspector Signature: <u>Daniel J Rohde</u>	Title: <u>STI SP001 Tank Inspector</u>
Tank(s) inspected ID: <u>Spillway EDG Tank</u>	Regulatory facility name and ID number (if applicable) _____	

Inspection Guidance:

- This checklist is intended as a model. Locally developed checklists are acceptable as long as they are substantially equivalent (as applicable).
- For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector per paragraph 4.1.2 of the standard.
- Remove promptly standing water or liquid discovered in the primary tank, secondary containment area, interstice, or spill container. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- In order to comply with EPA SPCC (Spill Prevention, Control and Countermeasure) rules, a facility should regularly test liquid level sensing devices to ensure proper operation (40 CFR 112.8(c)(8)(v)).
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for at least 36 months.
- Complete this checklist on an annual basis, supplemental to the owner monthly-performed inspection checklists.
- **Note: If a change has occurred to the tank system or containment that may affect the SPCC plan, the condition should be evaluated against the current plan requirement by a Professional Engineer knowledgeable in SPCC development and implementation.**

ITEM		STATUS	COMMENTS / DATE CORRECTED
Tank Foundation/Supports			
1	Free of tank settlement or foundation washout?	☑ Yes ☐ No	
2	Concrete pad or ring wall free of cracking and spalling?	☑ Yes ☐ No ☐ NA	
3	Tank supports in satisfactory condition?	☑ Yes ☐ No ☐ NA	
4	Is water able to drain away from tank if tank is resting on a foundation or on the ground?	☑ Yes ☐ No ☐ NA	
5	Is the grounding strap between the tank and foundation/supports in good condition?	☐ Yes ☐ No ☑ NA	
Tank Shell, Heads and Roof			
6	Free of visible signs of coating failure?	☑ Yes ☐ No ☐ NA	
7	Free of noticeable distortions, buckling, denting, or bulging?	☑ Yes ☐ No	

8	Free of standing water on roof?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA																	
9	Are all labels and tags intact and legible?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																	
Tank Manways, Piping, and Equipment																			
10	Flanged connection bolts tight and fully engaged with no sign of wear or corrosion?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA																	
Tank Equipment																			
11	Normal and emergency vents free of obstructions?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The base tank has no vents, or available ports.																
12	Normal vent on tanks storing gasoline equipped with pressure/vacuum vent?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA																	
13	Are flame arrestors free of corrosion and are air passages free of blockage?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA																	
14	Is the emergency vent in good working condition and functional, as required by manufacturer? Consult manufacturer's requirements. Verify that components are moving freely (including long-bolt manways).	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	The base tank has no vents, or available ports.																
15	Is interstitial leak detection equipment in good condition? Are windows on sight gauges clear? Are wire connections intact? If equipment has a test function, does it activate to confirm operation?"	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA																	
16	<p>Are all valves free of leaks, corrosion and other damage? Follow manufacturers' instructions for regular maintenance of these items. Check the following and verify (as applicable):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Anti-siphon valve <input type="checkbox"/> Check valve <input type="checkbox"/> Gate valve <input type="checkbox"/> Pressure regulator valve <input type="checkbox"/> Expansion relief valve <input type="checkbox"/> Solenoid valve <input type="checkbox"/> Fire valve <input type="checkbox"/> Shear valve 	<table border="0"> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> </table>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	
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<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A																		
17	Are strainers and filters clean and in good condition?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA																	
Insulated Tanks																			
18	Free of missing insulation? Insulation free of visible signs of damage? Insulation adequately protected from water intrusion?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA																	
19	Insulation free of noticeable areas of moisture?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA																	

20	Insulation free of mold?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
21	Free of visible signs of coating failure?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Tank / Piping Release Detection			
22	Is inventory control being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
23	Is release detection being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Other Equipment			
24	Are electrical wiring and boxes in good condition?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
25	Has the cathodic protection system on the tank been tested as required by the designing engineer?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

Additional Comments:

The Spillway Emergency Generator Tank appears to be a 100-gallon non-UL Listed single-walled CAT generator base tank. This tank has no vents or available ports but appears to be in acceptable condition and installed to the manufacturer specifications. No secondary containment is currently in place for the storage tank, but a dike could be installed in the room and drains sealed to provide adequate containment.

Storage tanks 0-1100 gallons in capacity with no secondary containment will be considered Category 3 under the STI SP001 aboveground storage tank inspection standard and will require formal external inspection and leak testing every ten years. Installation of adequate secondary containment will change the storage tank to Category 1, requiring only periodic monthly and annual inspection.

Inspection Photos:



Photo 01: Spillway Emergency Generator Base Tank

STI SP001 Annual Inspection Checklist

General Inspection Information: US Army Corps of Engineers Little Goose Dam 2021 SPCC Inspections

Inspection Date: <u>7/28/2021</u>	Prior Inspection Date: _____	Retain until date: <u>7/28/2024</u>
Inspector Name (print): <u>Daniel J Rohde, CHMM</u>	Inspector Signature: <u>Daniel J Rohde</u>	Title: <u>STI SP001 Tank Inspector</u>
Tank(s) inspected ID: <u>Gasoline Storage Tank</u>	Regulatory facility name and ID number (if applicable) _____	

Inspection Guidance:

- This checklist is intended as a model. Locally developed checklists are acceptable as long as they are substantially equivalent (as applicable).
- For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector per paragraph 4.1.2 of the standard.
- Remove promptly standing water or liquid discovered in the primary tank, secondary containment area, interstice, or spill container. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- In order to comply with EPA SPCC (Spill Prevention, Control and Countermeasure) rules, a facility should regularly test liquid level sensing devices to ensure proper operation (40 CFR 112.8(c)(8)(v)).
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for at least 36 months.
- Complete this checklist on an annual basis, supplemental to the owner monthly-performed inspection checklists.
- **Note: If a change has occurred to the tank system or containment that may affect the SPCC plan, the condition should be evaluated against the current plan requirement by a Professional Engineer knowledgeable in SPCC development and implementation.**

ITEM		STATUS	COMMENTS / DATE CORRECTED
Tank Foundation/Supports			
1	Free of tank settlement or foundation washout?	☑ Yes ☐ No	
2	Concrete pad or ring wall free of cracking and spalling?	☑ Yes ☐ No ☐ NA	
3	Tank supports in satisfactory condition?	☑ Yes ☐ No ☐ NA	
4	Is water able to drain away from tank if tank is resting on a foundation or on the ground?	☑ Yes ☐ No ☐ NA	
5	Is the grounding strap between the tank and foundation/supports in good condition?	☑ Yes ☐ No ☐ NA	
Tank Shell, Heads and Roof			
6	Free of visible signs of coating failure?	☑ Yes ☐ No ☐ NA	
7	Free of noticeable distortions, buckling, denting, or bulging?	☑ Yes ☐ No	

8	Free of standing water on roof?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA															
9	Are all labels and tags intact and legible?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No															
Tank Manways, Piping, and Equipment																	
10	Flanged connection bolts tight and fully engaged with no sign of wear or corrosion?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA															
Tank Equipment																	
11	Normal and emergency vents free of obstructions?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No															
12	Normal vent on tanks storing gasoline equipped with pressure/vacuum vent?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA															
13	Are flame arrestors free of corrosion and are air passages free of blockage?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA															
14	Is the emergency vent in good working condition and functional, as required by manufacturer? Consult manufacturer's requirements. Verify that components are moving freely (including long-bolt manways).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA															
15	Is interstitial leak detection equipment in good condition? Are windows on sight gauges clear? Are wire connections intact? If equipment has a test function, does it activate to confirm operation?"	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA															
16	<p>Are all valves free of leaks, corrosion and other damage? Follow manufacturers' instructions for regular maintenance of these items. Check the following and verify (as applicable):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Anti-siphon valve <input type="checkbox"/> Check valve <input type="checkbox"/> Gate valve <input type="checkbox"/> Pressure regulator valve <input type="checkbox"/> Expansion relief valve <input type="checkbox"/> Solenoid valve <input type="checkbox"/> Fire valve <input type="checkbox"/> Shear valve 	<table border="0"> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> </table>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	
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<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A																
<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A																
17	Are strainers and filters clean and in good condition?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA															
Insulated Tanks																	
18	<p>Free of missing insulation?</p> <p>Insulation free of visible signs of damage?</p> <p>Insulation adequately protected from water intrusion?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA															
19	Insulation free of noticeable areas of moisture?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA															

20	Insulation free of mold?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
21	Free of visible signs of coating failure?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Tank / Piping Release Detection			
22	Is inventory control being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
23	Is release detection being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Other Equipment			
24	Are electrical wiring and boxes in good condition?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
25	Has the cathodic protection system on the tank been tested as required by the designing engineer?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

Additional Comments:

Gasoline Storage Tank appears to be a 3000-gallon UL142 style closed top diked storage tank. It appears to be in generally excellent condition and installed to manufacturer specifications inside a covered tertiary containment. The tank has adequate normal ventilation and emergency venting for the primary tank and interstice are provided via correctly installed long-bolt manway.

This Category 1 storage tank should continue to be inspected periodically monthly and annually in accordance with the STI SP001 Table of Inspection Schedules.

Inspection Photos:



Photo 01: Gasoline Storage Tank

STI SP001 Annual Inspection Checklist

General Inspection Information: US Army Corps of Engineers Little Goose Dam 2021 SPCC Inspections

Inspection Date: <u>7/28/2021</u>	Prior Inspection Date: _____	Retain until date: <u>7/28/2024</u>
Inspector Name (print): <u>Daniel J Rohde, CHMM</u>	Inspector Signature: <u>Daniel J Rohde</u>	Title: <u>STI SP001 Tank Inspector</u>
Tank(s) inspected ID: <u>JFF Emergency Generator Tank</u>	Regulatory facility name and ID number (if applicable) _____	

Inspection Guidance:

- This checklist is intended as a model. Locally developed checklists are acceptable as long as they are substantially equivalent (as applicable).
- For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector per paragraph 4.1.2 of the standard.
- Remove promptly standing water or liquid discovered in the primary tank, secondary containment area, interstice, or spill container. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- In order to comply with EPA SPCC (Spill Prevention, Control and Countermeasure) rules, a facility should regularly test liquid level sensing devices to ensure proper operation (40 CFR 112.8(c)(8)(v)).
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for at least 36 months.
- Complete this checklist on an annual basis, supplemental to the owner monthly-performed inspection checklists.
- **Note: If a change has occurred to the tank system or containment that may affect the SPCC plan, the condition should be evaluated against the current plan requirement by a Professional Engineer knowledgeable in SPCC development and implementation.**

ITEM		STATUS	COMMENTS / DATE CORRECTED
Tank Foundation/Supports			
1	Free of tank settlement or foundation washout?	☑ Yes ☐ No	
2	Concrete pad or ring wall free of cracking and spalling?	☑ Yes ☐ No ☐ NA	
3	Tank supports in satisfactory condition?	☑ Yes ☐ No ☐ NA	
4	Is water able to drain away from tank if tank is resting on a foundation or on the ground?	☑ Yes ☐ No ☐ NA	
5	Is the grounding strap between the tank and foundation/supports in good condition?	☑ Yes ☐ No ☐ NA	
Tank Shell, Heads and Roof			
6	Free of visible signs of coating failure?	☑ Yes ☐ No ☐ NA	
7	Free of noticeable distortions, buckling, denting, or bulging?	☑ Yes ☐ No	

8	Free of standing water on roof?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
9	Are all labels and tags intact and legible?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Tank Manways, Piping, and Equipment			
10	Flanged connection bolts tight and fully engaged with no sign of wear or corrosion?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
Tank Equipment			
11	Normal and emergency vents free of obstructions?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
12	Normal vent on tanks storing gasoline equipped with pressure/vacuum vent?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
13	Are flame arrestors free of corrosion and are air passages free of blockage?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
14	Is the emergency vent in good working condition and functional, as required by manufacturer? Consult manufacturer's requirements. Verify that components are moving freely (including long-bolt manways).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
15	Is interstitial leak detection equipment in good condition? Are windows on sight gauges clear? Are wire connections intact? If equipment has a test function, does it activate to confirm operation?"	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
16	Are all valves free of leaks, corrosion and other damage? Follow manufacturers' instructions for regular maintenance of these items. Check the following and verify (as applicable): <input type="checkbox"/> Anti-siphon valve <input type="checkbox"/> Check valve <input type="checkbox"/> Gate valve <input type="checkbox"/> Pressure regulator valve <input type="checkbox"/> Expansion relief valve <input type="checkbox"/> Solenoid valve <input type="checkbox"/> Fire valve <input type="checkbox"/> Shear valve	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
17	Are strainers and filters clean and in good condition?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Insulated Tanks			
18	Free of missing insulation? Insulation free of visible signs of damage? Insulation adequately protected from water intrusion?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
19	Insulation free of noticeable areas of moisture?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

20	Insulation free of mold?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
21	Free of visible signs of coating failure?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Tank / Piping Release Detection			
22	Is inventory control being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
23	Is release detection being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Other Equipment			
24	Are electrical wiring and boxes in good condition?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
25	Has the cathodic protection system on the tank been tested as required by the designing engineer?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

Additional Comments:

The Juvenile Fish Farm Emergency Generator Tank appears to be a UL Listed double wall generator base tank. Tank shell and surface coating are in generally good condition, and the unit appears to be installed to manufacturer specifications. The generator itself appears to have an oil leak during operation that should be repaired when possible, absorbent pads have been placed beneath the leak in the meantime.

This Category 1 storage tank should continue to be inspected periodically monthly and annually in accordance with the STI SP001 Table of Inspection Schedules.

Inspection Photos:



Photo 01: Juvenile Fish Facility Emergency Generator



Photo 02: Oil Leak From Generator Unit During Operation

STI SP001 Annual Inspection Checklist

General Inspection Information: US Army Corps of Engineers Little Goose Dam 2021 SPCC Inspections

Inspection Date: <u>7/28/2021</u>	Prior Inspection Date: _____	Retain until date: <u>7/28/2024</u>
Inspector Name (print): <u>Daniel J Rohde, CHMM</u>	Inspector Signature: <u><i>Daniel J Rohde</i></u>	Title: <u>STI SP001 Tank Inspector</u>
Tank(s) inspected ID: <u>Used Oil Tank 1</u>	Regulatory facility name and ID number (if applicable) _____	

Inspection Guidance:

- This checklist is intended as a model. Locally developed checklists are acceptable as long as they are substantially equivalent (as applicable).
- For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector per paragraph 4.1.2 of the standard.
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- Retain the completed checklists for at least 36 months.
- Complete this checklist on an annual basis, supplemental to the owner monthly-performed inspection checklists.
- **Note: If a change has occurred to the tank system or containment that may affect the SPCC plan, the condition should be evaluated against the current plan requirement by a Professional Engineer knowledgeable in SPCC development and implementation.**

ITEM		STATUS	COMMENTS / DATE CORRECTED
Tank Foundation/Supports			
1	Free of tank settlement or foundation washout?	☑ Yes ☐ No	
2	Concrete pad or ring wall free of cracking and spalling?	☑ Yes ☐ No ☐ NA	
3	Tank supports in satisfactory condition?	☑ Yes ☐ No ☐ NA	
4	Is water able to drain away from tank if tank is resting on a foundation or on the ground?	☑ Yes ☐ No ☐ NA	
5	Is the grounding strap between the tank and foundation/supports in good condition?	☐ Yes ☐ No ☐ NA	
Tank Shell, Heads and Roof			
6	Free of visible signs of coating failure?	☑ Yes ☐ No ☐ NA	
7	Free of noticeable distortions, buckling, denting, or bulging?	☑ Yes ☐ No	

8	Free of standing water on roof?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA															
9	Are all labels and tags intact and legible?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No															
Tank Manways, Piping, and Equipment																	
10	Flanged connection bolts tight and fully engaged with no sign of wear or corrosion?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA															
Tank Equipment																	
11	Normal and emergency vents free of obstructions?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA															
12	Normal vent on tanks storing gasoline equipped with pressure/vacuum vent?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA															
13	Are flame arrestors free of corrosion and are air passages free of blockage?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA															
14	Is the emergency vent in good working condition and functional, as required by manufacturer? Consult manufacturer's requirements. Verify that components are moving freely (including long-bolt manways).	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA															
15	Is interstitial leak detection equipment in good condition? Are windows on sight gauges clear? Are wire connections intact? If equipment has a test function, does it activate to confirm operation?"	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA															
16	<p>Are all valves free of leaks, corrosion, and other damage? Follow manufacturers' instructions for regular maintenance of these items. Check the following and verify (as applicable):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Anti-siphon valve <input type="checkbox"/> Check valve <input type="checkbox"/> Gate valve <input type="checkbox"/> Pressure regulator valve <input type="checkbox"/> Expansion relief valve <input type="checkbox"/> Solenoid valve <input type="checkbox"/> Fire valve <input type="checkbox"/> Shear valve 	<table border="0"> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> </table>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	
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17	Are strainers and filters clean and in good condition?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA															
Insulated Tanks																	
18	<p>Free of missing insulation?</p> <p>Insulation free of visible signs of damage?</p> <p>Insulation adequately protected from water intrusion?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA															
19	Insulation free of noticeable areas of moisture?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA															

20	Insulation free of mold?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
21	Free of visible signs of coating failure?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Tank / Piping Release Detection			
22	Is inventory control being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
23	Is release detection being performed and documented if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Other Equipment			
24	Are electrical wiring and boxes in good condition?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
25	Has the cathodic protection system on the tank been tested as required by the designing engineer?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

Additional Comments:

The used oil storage tank appears to be a 500-gallon double-walled polymer storage tank. There are no normal or emergency vents on the tank, but it appears to be installed to manufacturer specification and in generally excellent condition. Overfill prevention is provided by an analogue level gauge that is visible while transferring used oil from portable containers to the storage tank.

This Category 1 storage tank should continue to be inspected periodically monthly and annually in accordance with the STI SP001 Table of Inspection Schedules.

Inspection Photos:



Photo 01: Used Oil Storage Tank

STI SP001 Annual Inspection Checklist

General Inspection Information: US Army Corp of Engineers Little Goose Dam 2021 SPCC Inspections

Inspection Date: <u>7/28/2021</u>	Prior Inspection Date: _____	Retain until date: <u>7/28/2024</u>
Inspector Name (print): <u>Daniel J Rohde, CHMM</u>	Inspector Signature: <u>Daniel J Rohde</u>	Title: <u>STI SP001 Tank Inspector</u>
Tank(s) inspected ID: <u>Used Oil Tank 2</u>	Regulatory facility name and ID number (if applicable) _____	

Inspection Guidance:

- This checklist is intended as a model. Locally developed checklists are acceptable as long as they are substantially equivalent (as applicable).
- For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector per paragraph 4.1.2 of the standard.
- Remove promptly standing water or liquid discovered in the primary tank, secondary containment area, interstice, or spill container. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- In order to comply with EPA SPCC (Spill Prevention, Control and Countermeasure) rules, a facility should regularly test liquid level sensing devices to ensure proper operation (40 CFR 112.8(c)(8)(v)).
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for at least 36 months.
- Complete this checklist on an annual basis, supplemental to the owner monthly-performed inspection checklists.
- **Note: If a change has occurred to the tank system or containment that may affect the SPCC plan, the condition should be evaluated against the current plan requirement by a Professional Engineer knowledgeable in SPCC development and implementation.**

ITEM	STATUS	COMMENTS / DATE CORRECTED
Tank Foundation/Supports		
1	Free of tank settlement or foundation washout?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2	Concrete pad or ring wall free of cracking and spalling?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
3	Tank supports in satisfactory condition?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
4	Is water able to drain away from tank if tank is resting on a foundation or on the ground?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
5	Is the grounding strap between the tank and foundation/supports in good condition?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Tank Shell, Heads and Roof		
6	Free of visible signs of coating failure?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
7	Free of noticeable distortions, buckling, denting, or bulging?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

8	Free of standing water on roof?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
9	Are all labels and tags intact and legible?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Tank Manways, Piping, and Equipment			
10	Flanged connection bolts tight and fully engaged with no sign of wear or corrosion?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Tank Equipment			
11	Normal and emergency vents free of obstructions?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
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Inspection Photos:



Photo 01: Used Oil Storage Tank

CERTIFICATION

Steel Tank Institute

Daniel J Rohde

STI Inspector No: (b)(6)

Expires: **August 9, 2023**

The person whose name appears on this certificate has met all of the requirements to become an STI authorized SP001 Above Ground Storage Tank System Inspector in accordance with the STI Standard SP001.

Dana C. Schmidt

Dana Schmidt, P.E.
Steel Tank Institute



The official status of this certificate can be verified at www.steeltank.com.

Issue Date:
08/09/2018